

What's the Catch?





**Cabrillo
Marine
Aquarium**

MSRP and Cabrillo Marine Aquarium

present

Our Gull Amanda

in

**What's
the
Catch?**



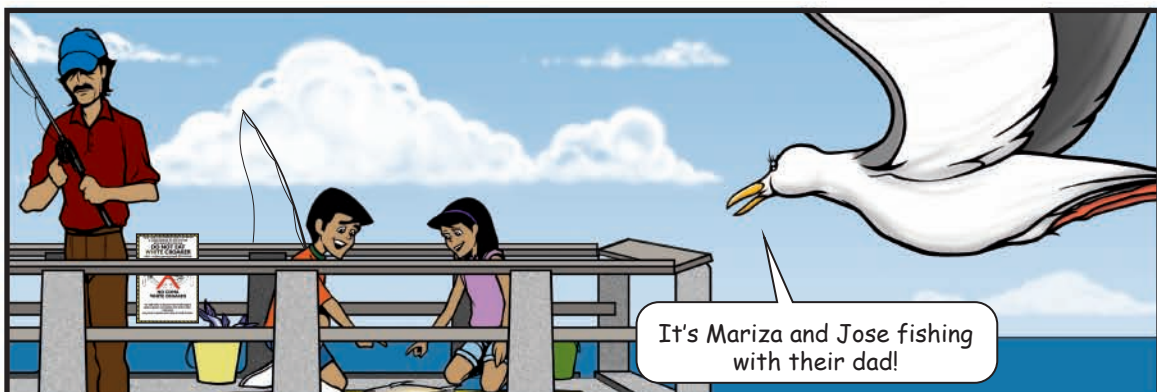
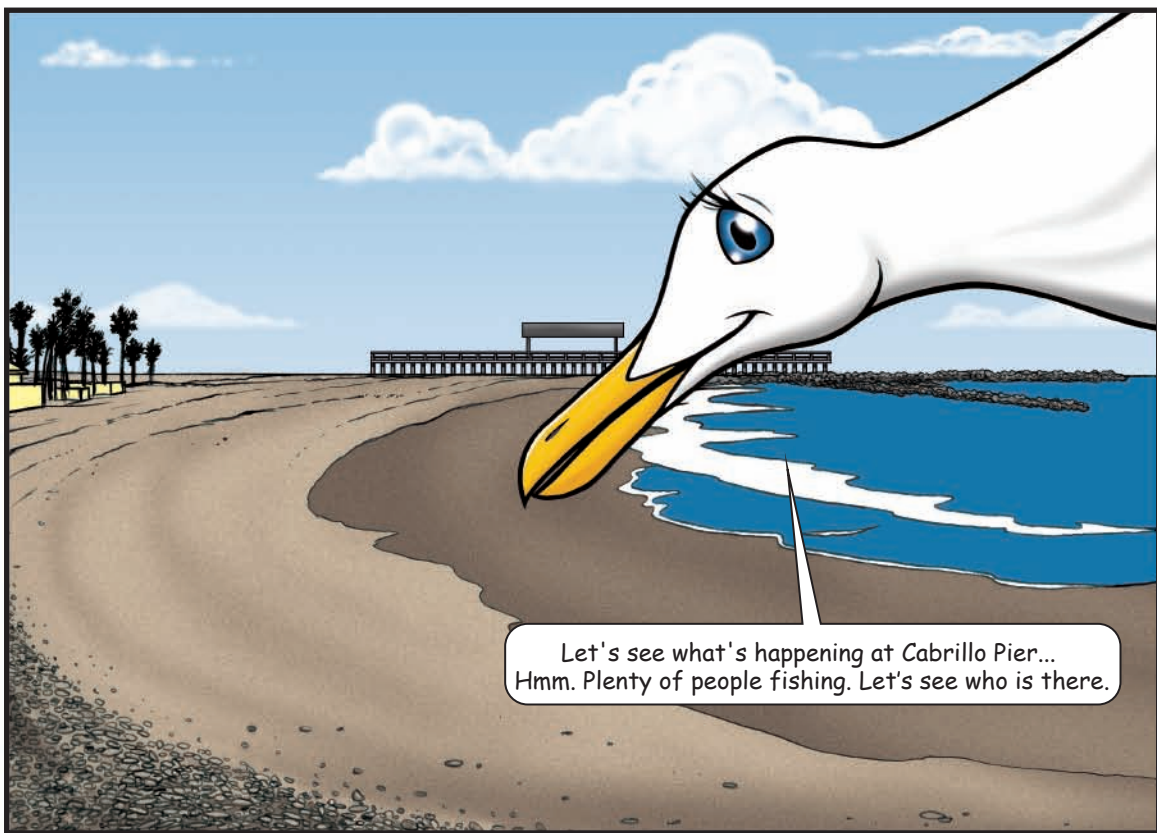
MSRP is a multi-agency effort to restore natural resources harmed by past releases of DDTs and PCBs in the southern California marine environment. Funded by a legal settlement with the companies and industries responsible for the chemical releases, MSRP is working on a variety of restoration projects, including projects to restore fishing opportunities in Southern California. For more information, please visit us at www.montroserestoration.gov or call **(562) 980-3236**.

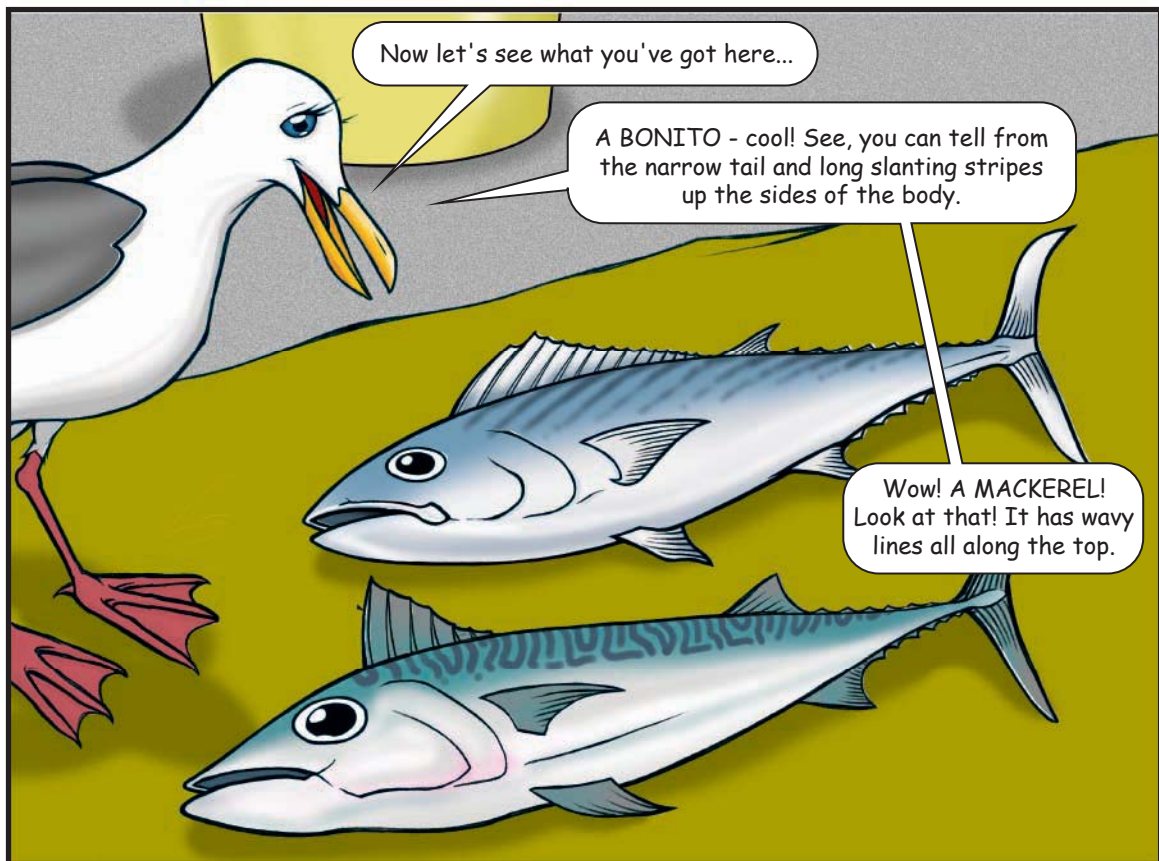
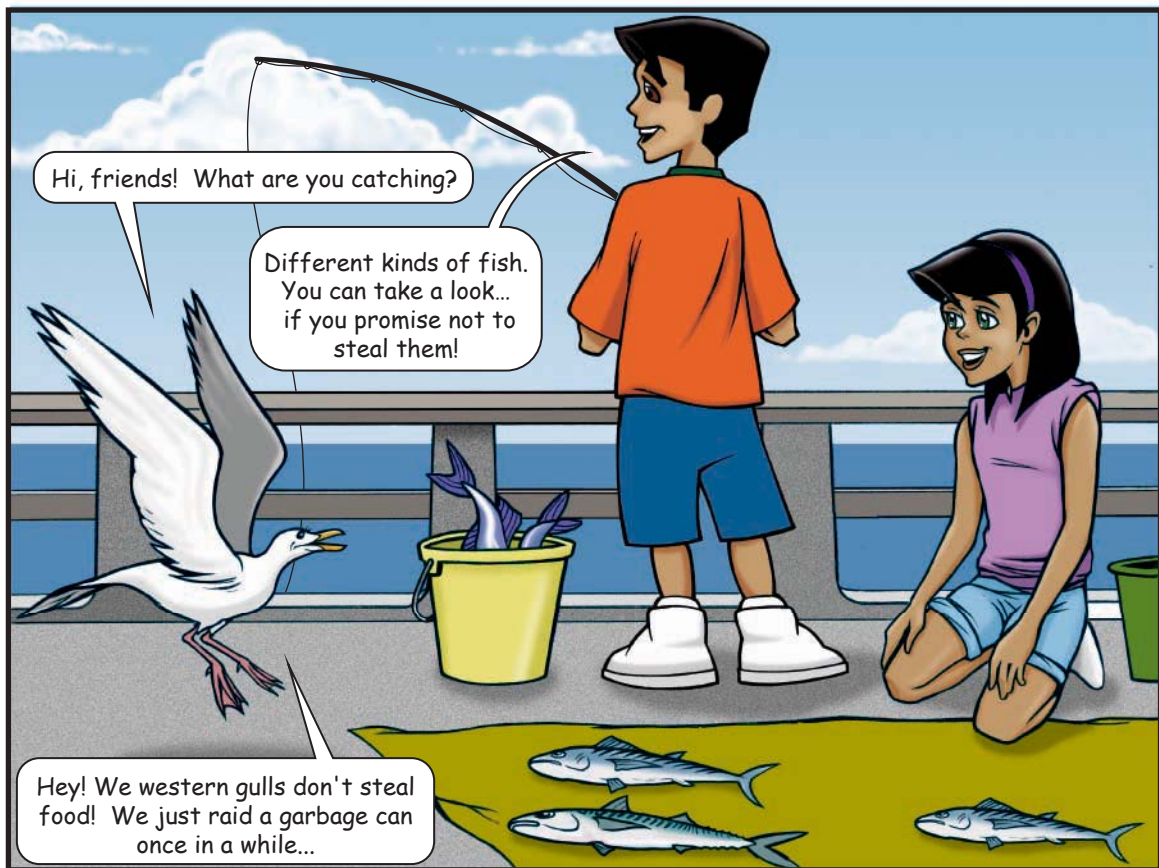


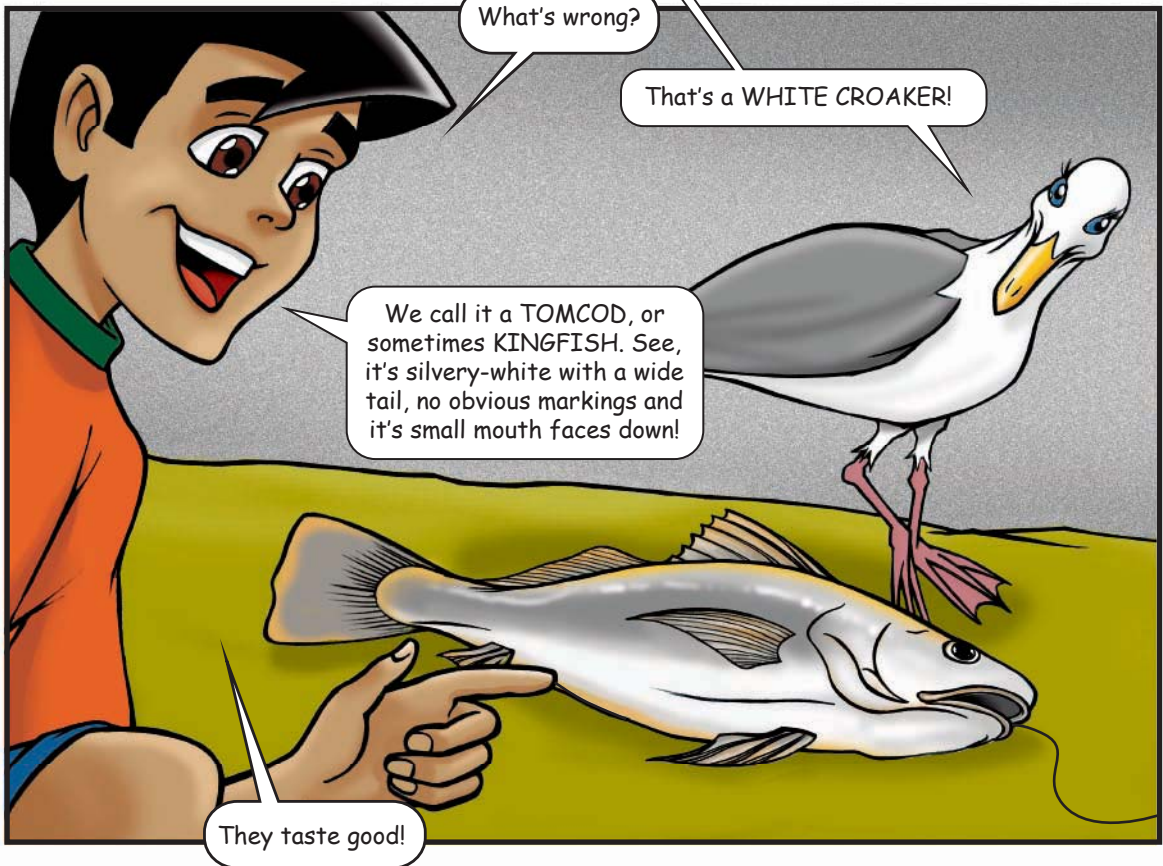
**Cabrillo
Marine
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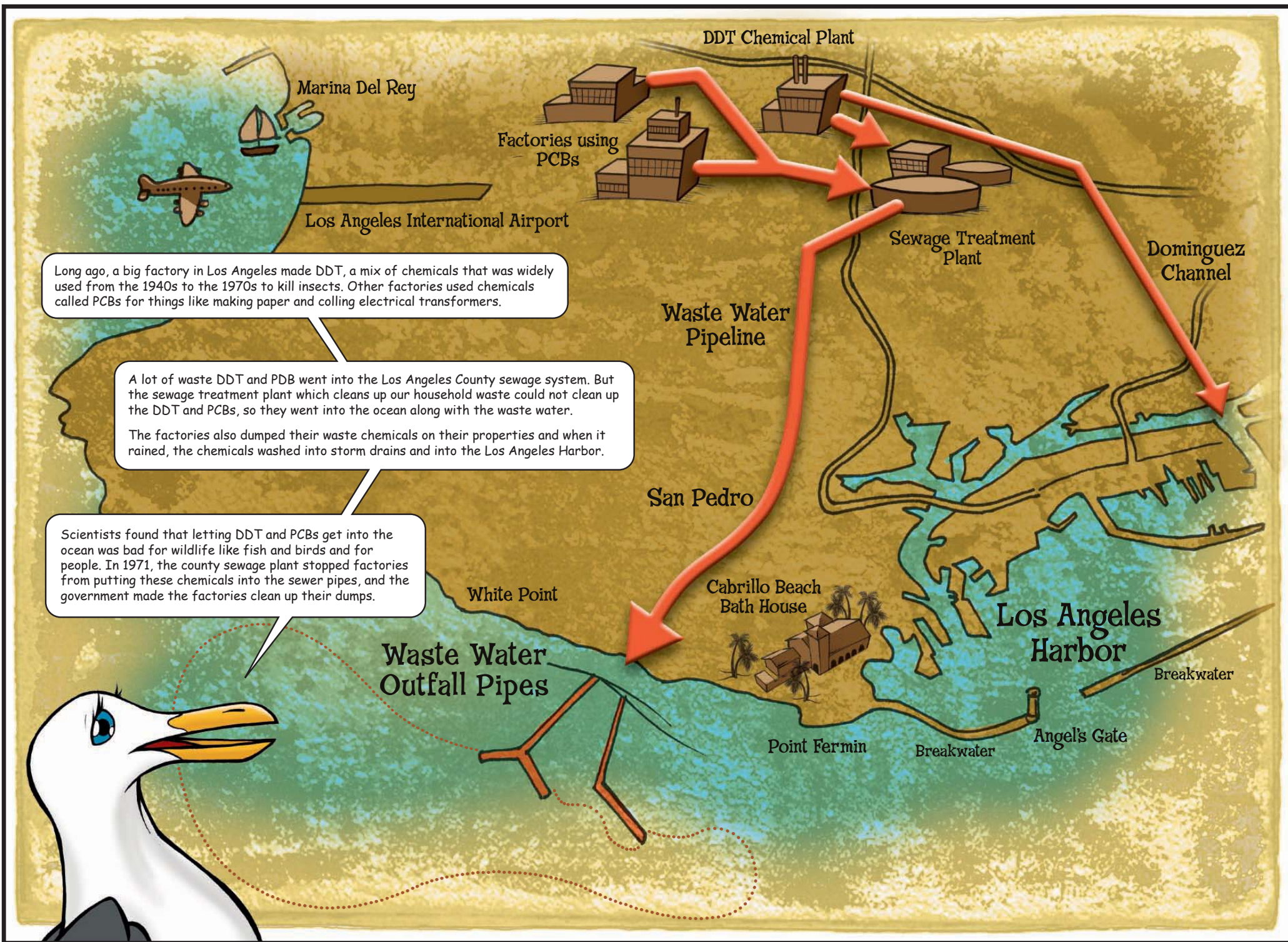
Cabrillo Marine Aquarium is an educational, recreational, and research facility dedicated to providing rich and varied opportunities for early and continuing education of the general public about the marine environment of Southern California. Cabrillo Marine Aquarium is located at 3270 Stephen White Drive in San Pedro and is a facility of the City of Los Angeles Department of Recreation and Parks. Visit our website at www.cabrilloaq.org or call **(310) 548-7562**.

Amanda, a western sea gull, likes to hunt for food in San Pedro, an old fishing town and seaport in Los Angeles Harbor.









Marina Del Rey

Los Angeles International Airport

DDT Chemical Plant

Factories using
PCBs

Sewage Treatment
Plant

Dominguez
Channel

Waste Water
Pipeline

San Pedro

White Point

Cabrillo Beach
Bath House

Los Angeles
Harbor

Breakwater

Point Fermin

Breakwater

Angel's Gate

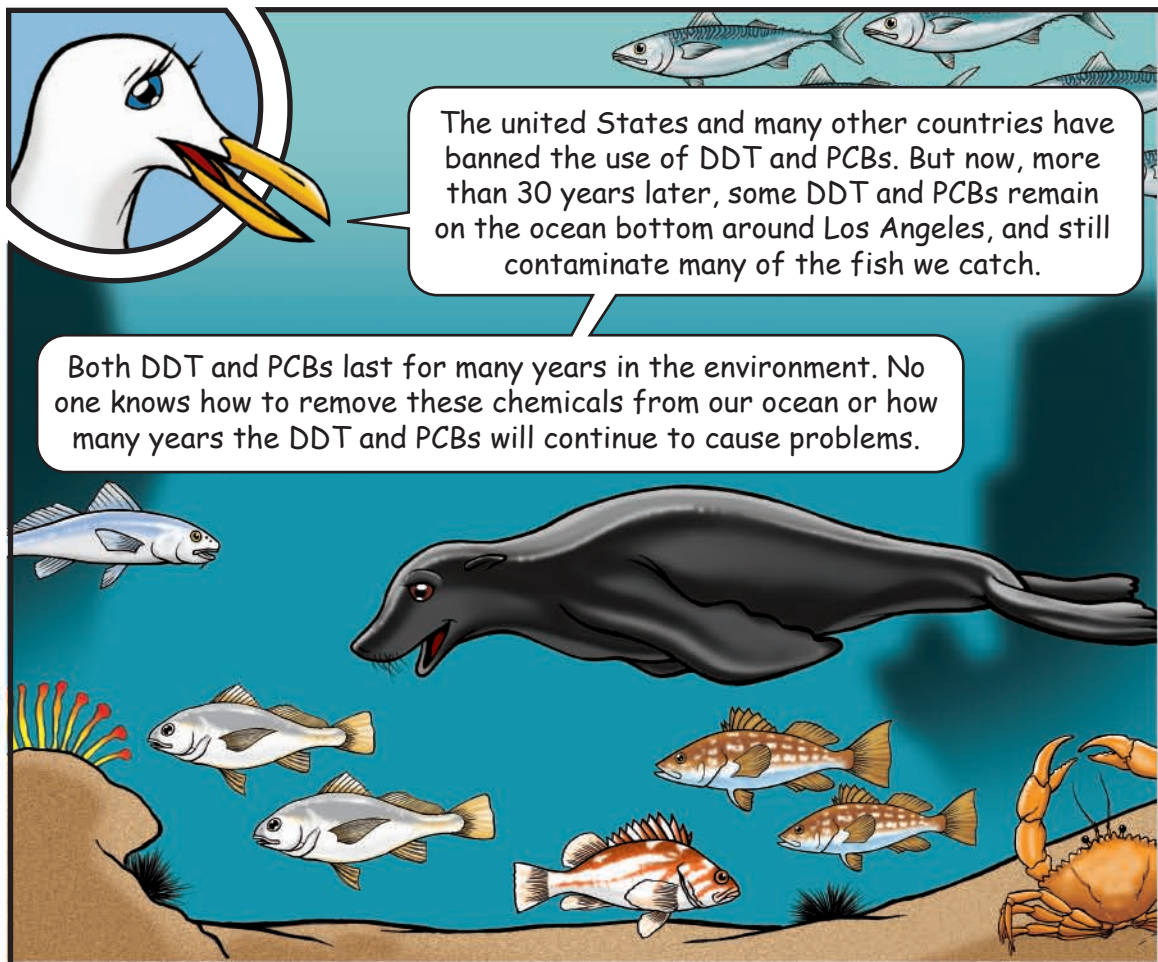
Waste Water
Outfall Pipes

Long ago, a big factory in Los Angeles made DDT, a mix of chemicals that was widely used from the 1940s to the 1970s to kill insects. Other factories used chemicals called PCBs for things like making paper and colling electrical transformers.

A lot of waste DDT and PDB went into the Los Angeles County sewage system. But the sewage treatment plant which cleans up our household waste could not clean up the DDT and PCBs, so they went into the ocean along with the waste water.

The factories also dumped their waste chemicals on their properties and when it rained, the chemicals washed into storm drains and into the Los Angeles Harbor.

Scientists found that letting DDT and PCBs get into the ocean was bad for wildlife like fish and birds and for people. In 1971, the county sewage plant stopped factories from putting these chemicals into the sewer pipes, and the government made the factories clean up their dumps.



Both DDT and PCBs last for many years in the environment. No one knows how to remove these chemicals from our ocean or how many years the DDT and PCBs will continue to cause problems.

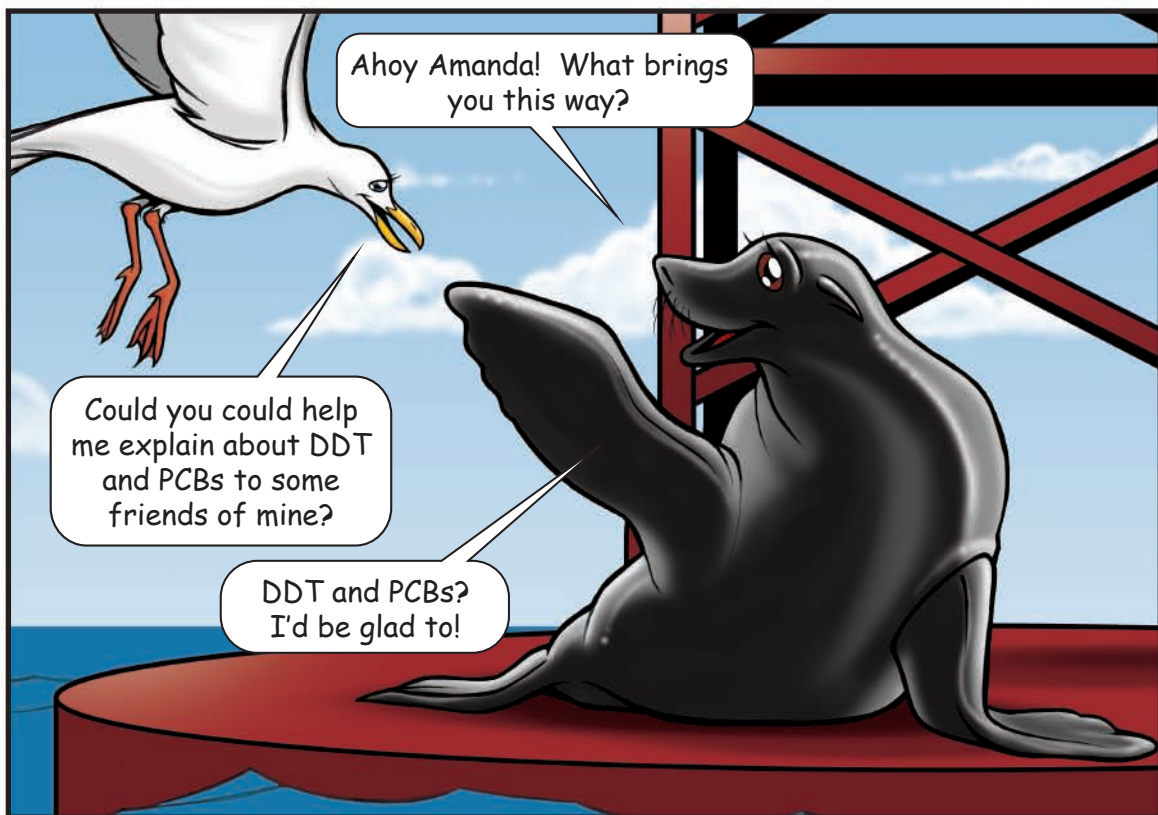


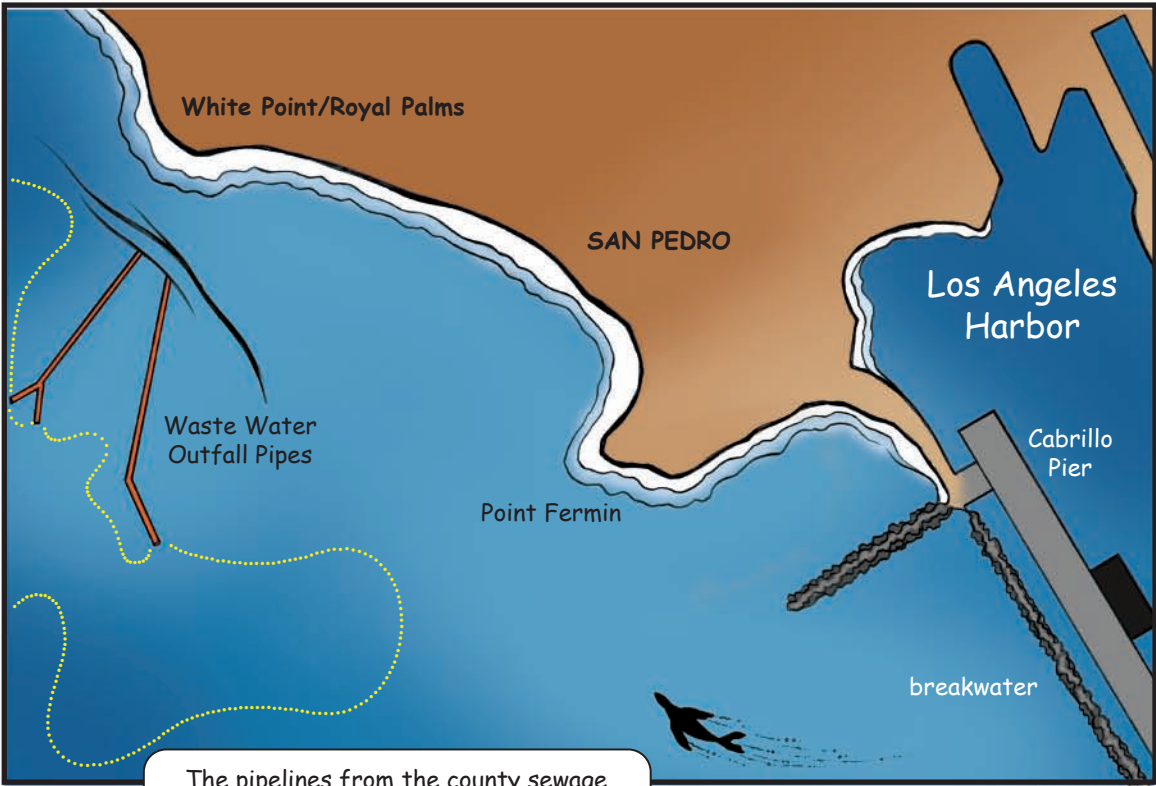
What do DDT and PCBs do to fish and birds?

Well...I know a friend who can help me explain it to you.

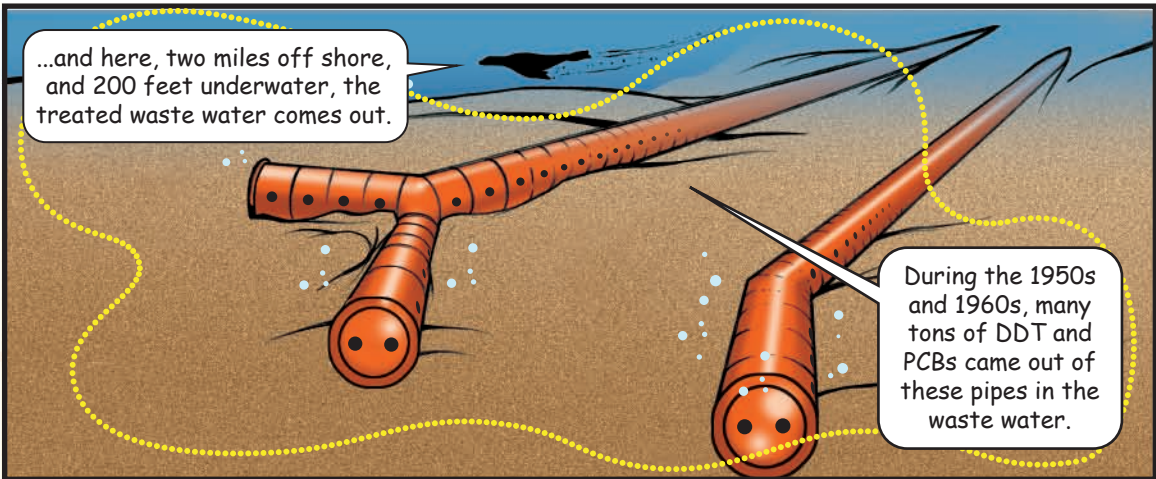
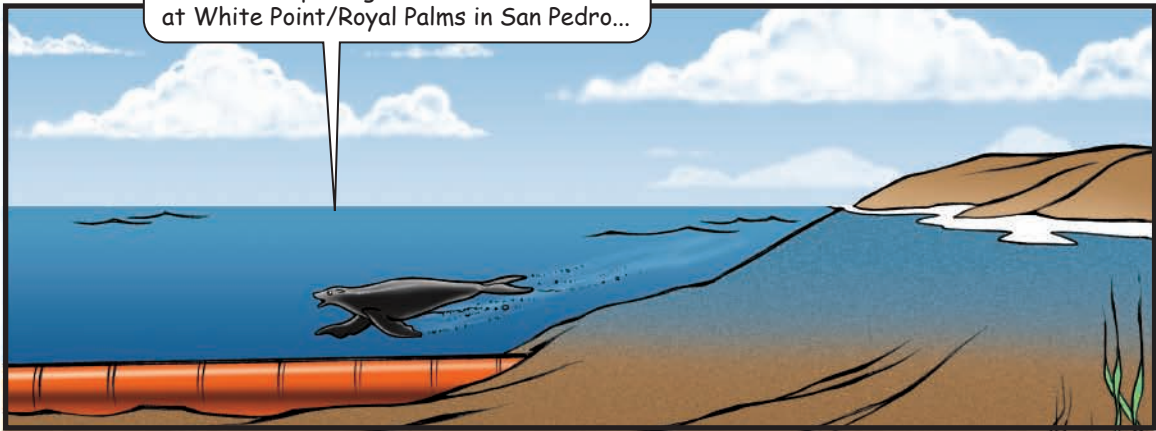


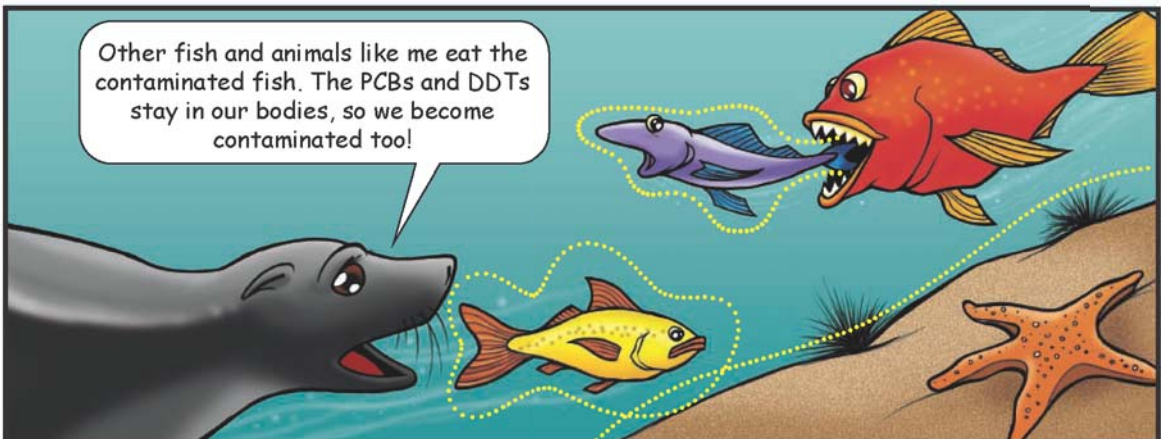
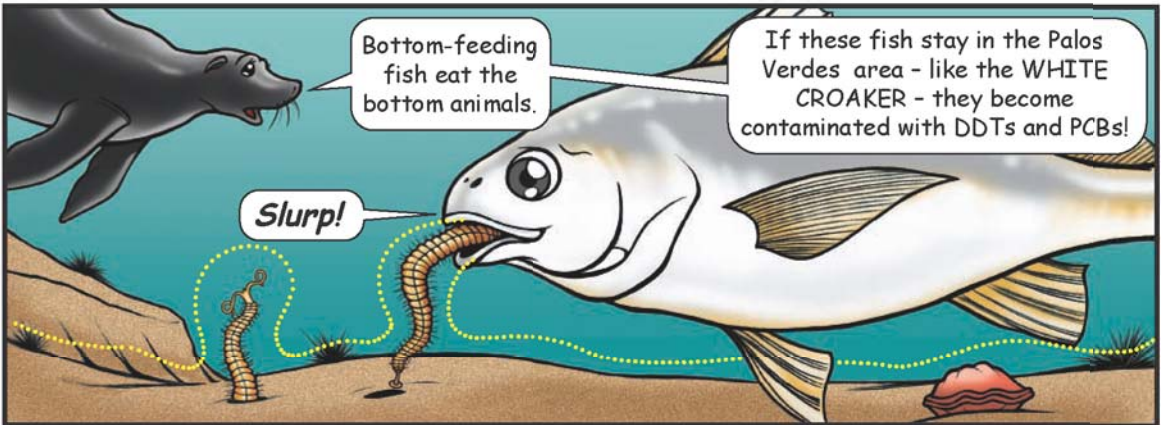
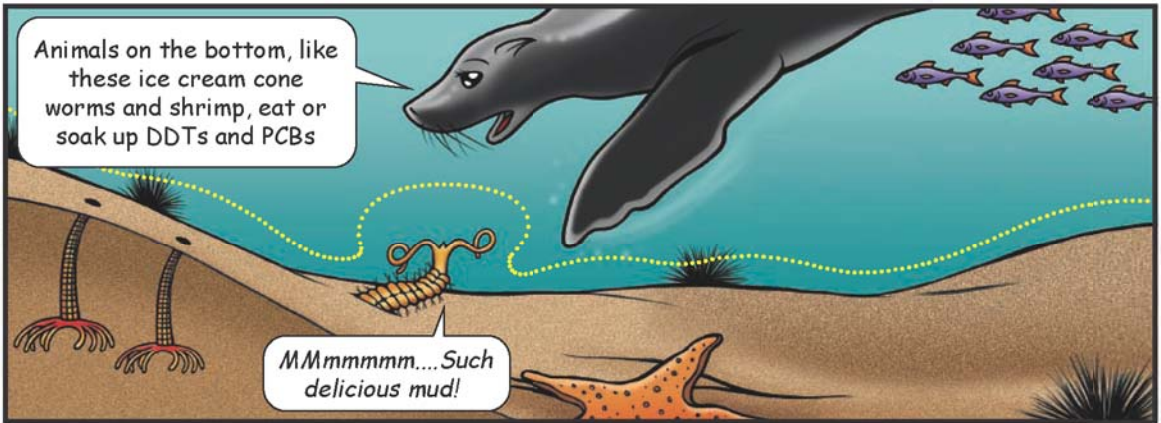
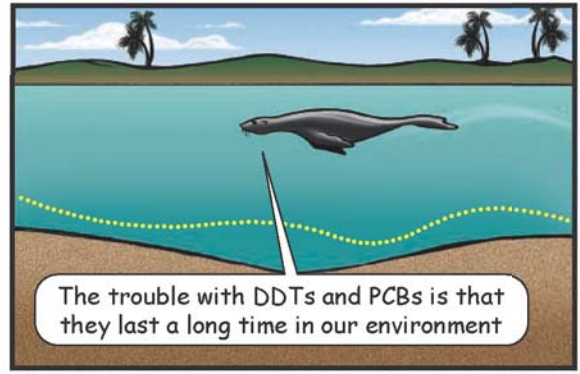
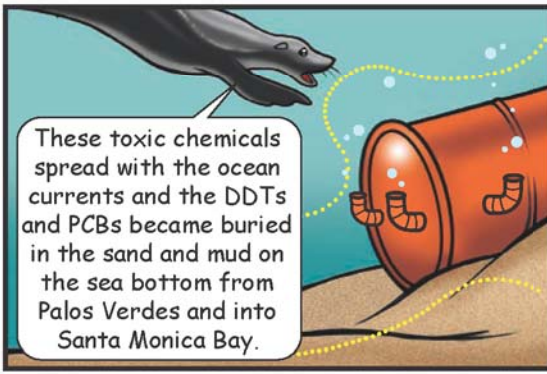
Ahoy, Fernando!



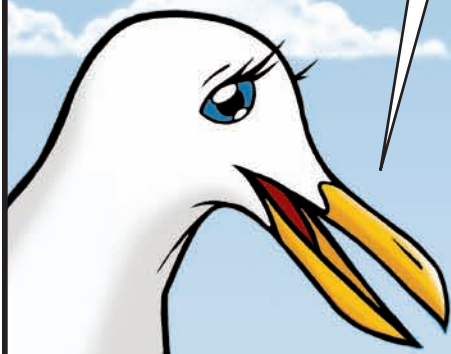


The pipelines from the county sewage treatment plant go into the ocean here at White Point/Royal Palms in San Pedro...

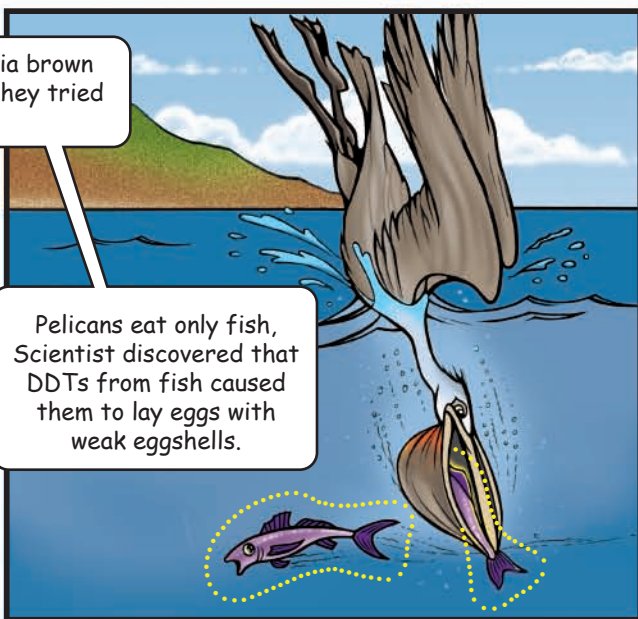




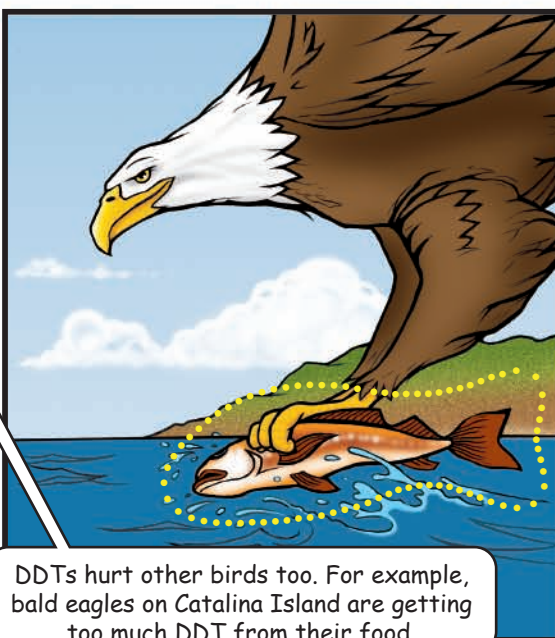
People started noticing that California brown pelicans were crushing their eggs as they tried to warm them in the nest.



Pelicans eat only fish, Scientist discovered that DDTs from fish caused them to lay eggs with weak eggshells.



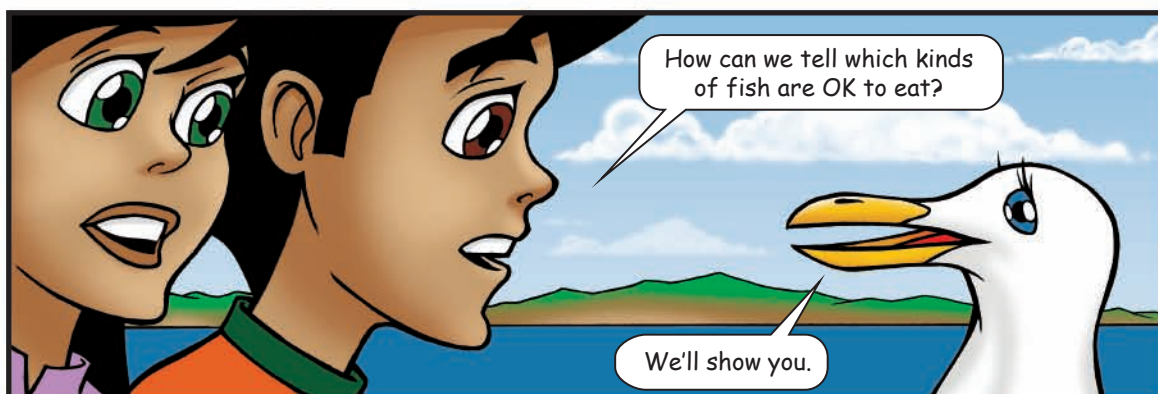
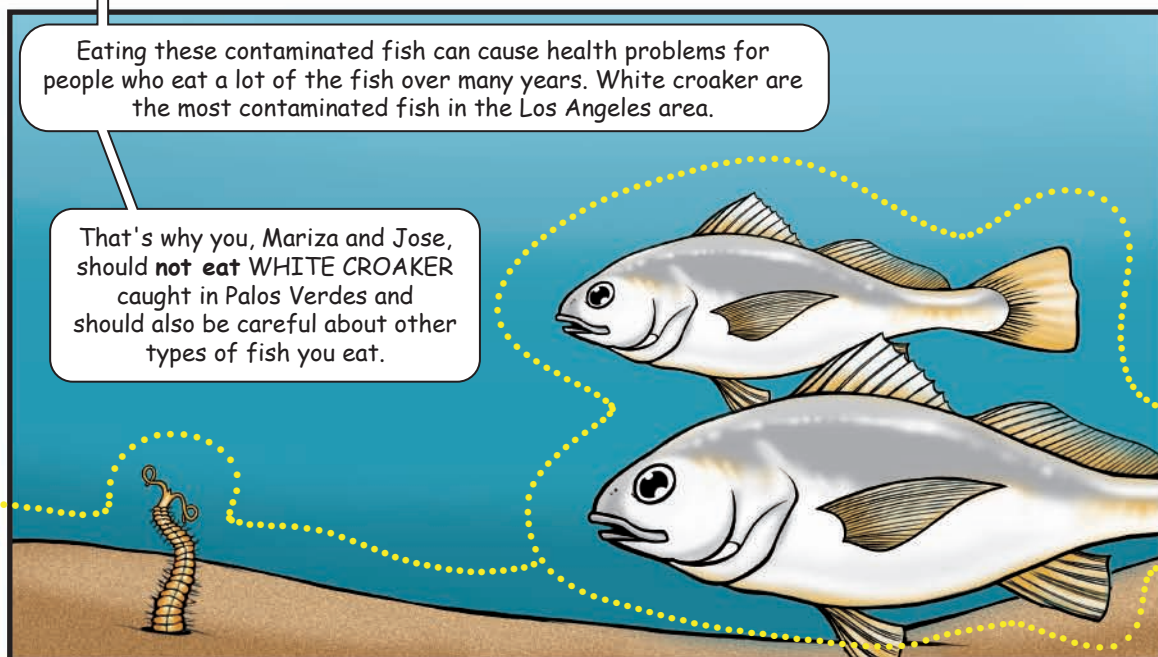
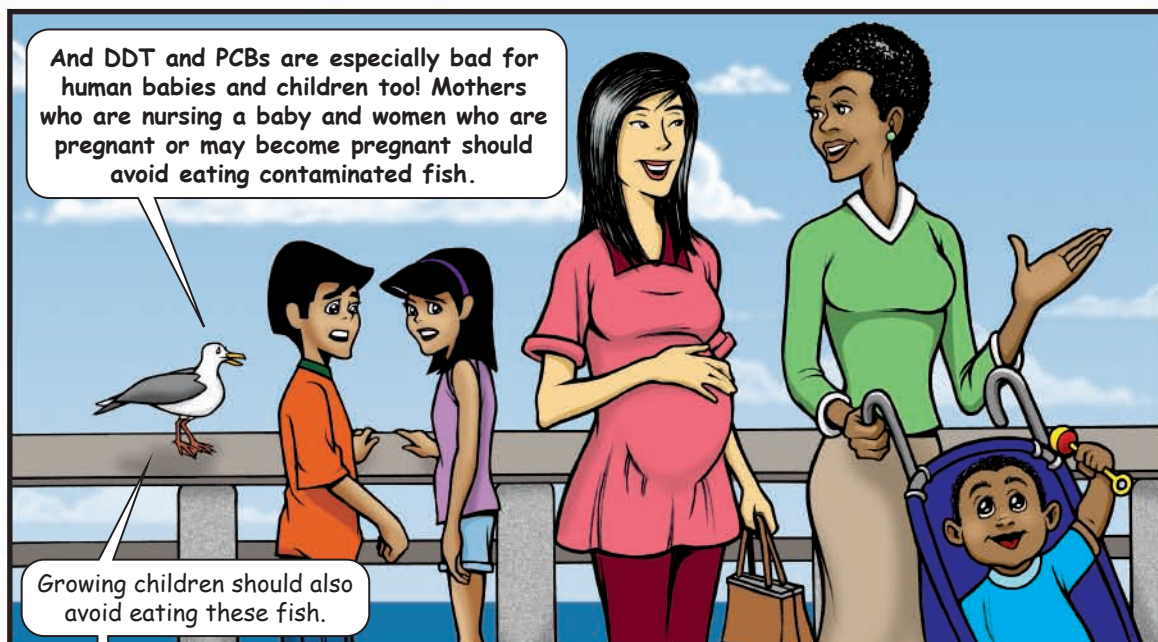
The eggshells were too thin, and almost all the baby pelicans died!



DDTs hurt other birds too. For example, bald eagles on Catalina Island are getting too much DDT from their food.

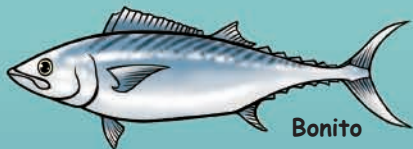
So the eagle chicks die in their eggs before they can hatch.







Very sleek fish like MACKEREL and BONITO are low in DDT and PCBs. They're fast swimmers that travel widely—they don't stay in this contaminated area.



Bonito



Mackerel

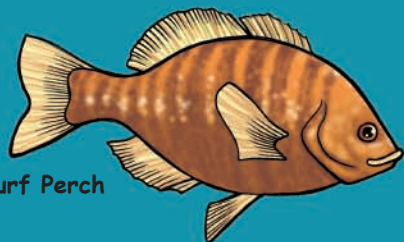


White Croaker

You should **be cautious** with other fish like kelp bass, surfperches, corbina, rockfish, scorpionfish, and with sea urchins and crabs. These are **OK TO EAT** if you eat them **only once in a while** from this area, like maybe once or twice a month.



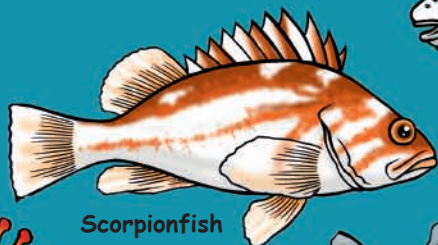
Kelp Bass



Surf Perch



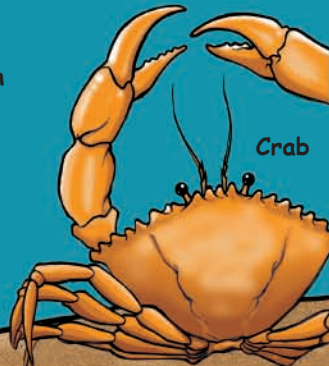
Corbina



Scorpionfish



Rockfish

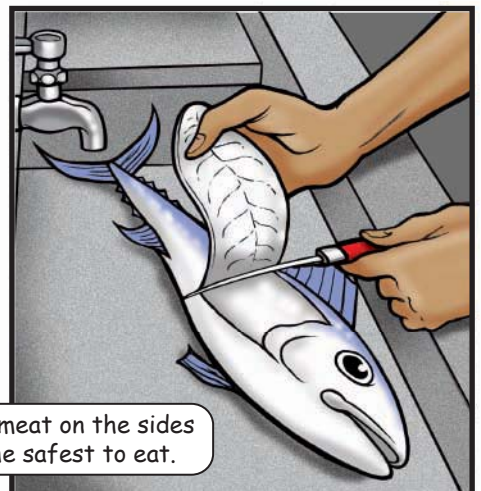
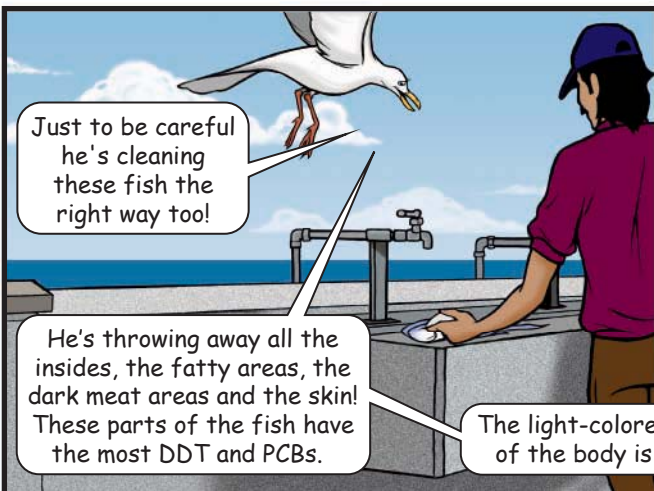
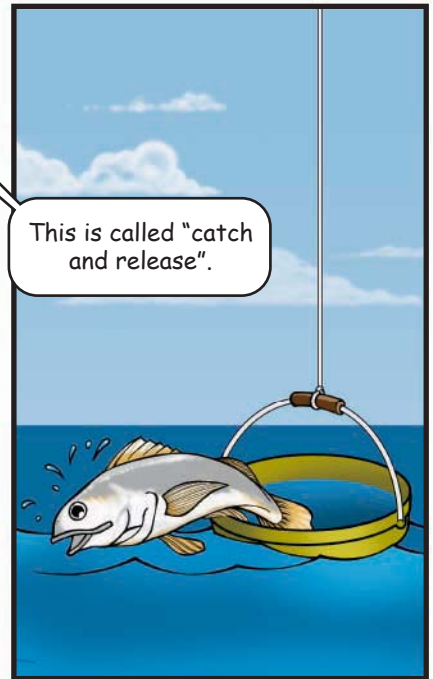
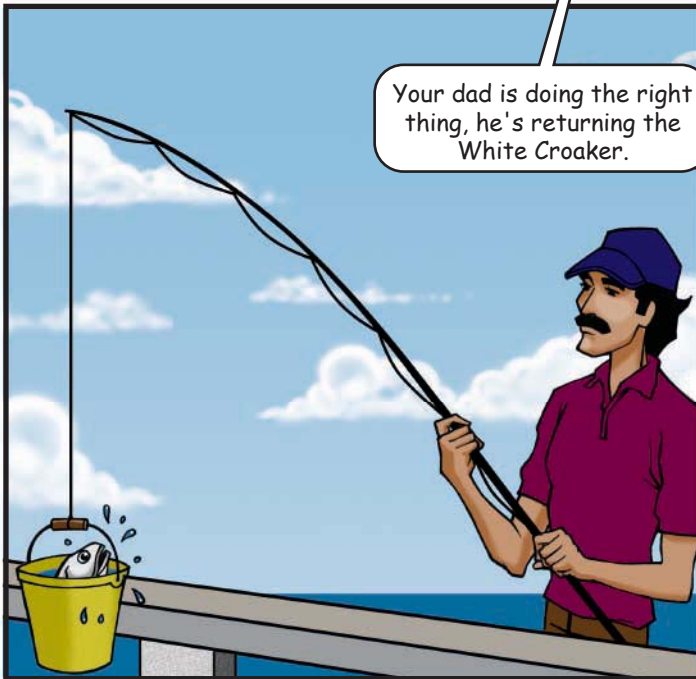


Crab

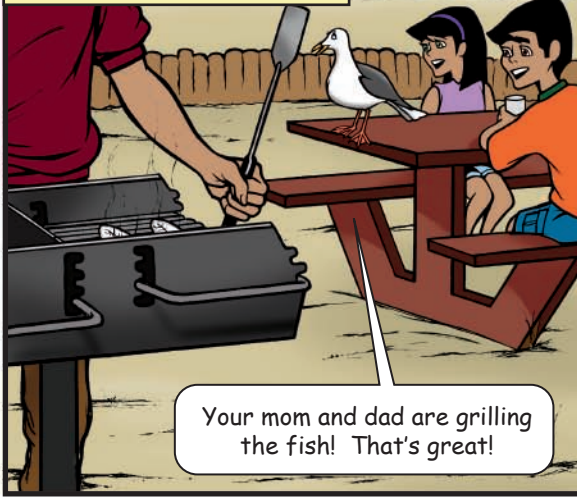


Sea Urchin





Later at the picnic area...

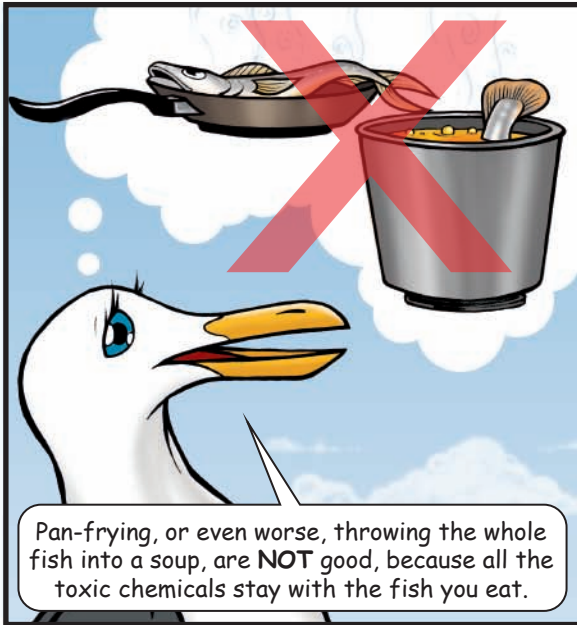


Your mom and dad are grilling the fish! That's great!

That means that most of the **FAT**, the **MOST CONTAMINATED** part, is dripping away, leaving you with the safer parts to eat!



Grilling and steaming are the best ways to cook the fish.



Pan-frying, or even worse, throwing the whole fish into a soup, are **NOT** good, because all the toxic chemicals stay with the fish you eat.



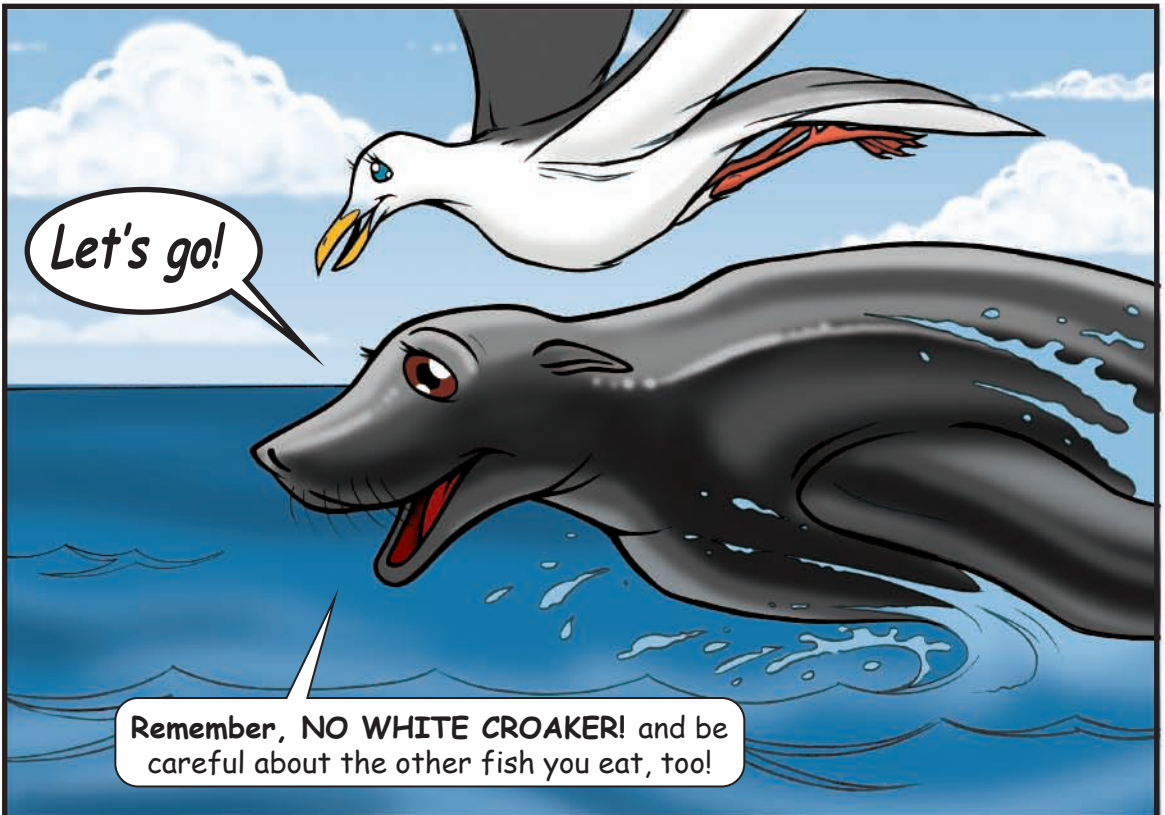
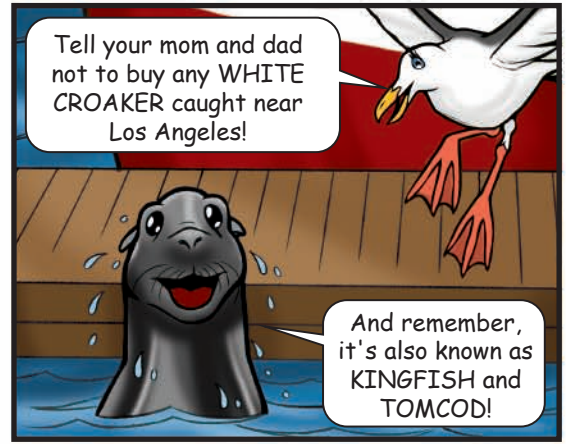
You know, fish is a great food—nutritious and usually healthy!



And it tastes great!

Yes it does!

But in the Los Angeles area, you have to be careful where you catch the fish, and which ones you eat!



Fish Smart!



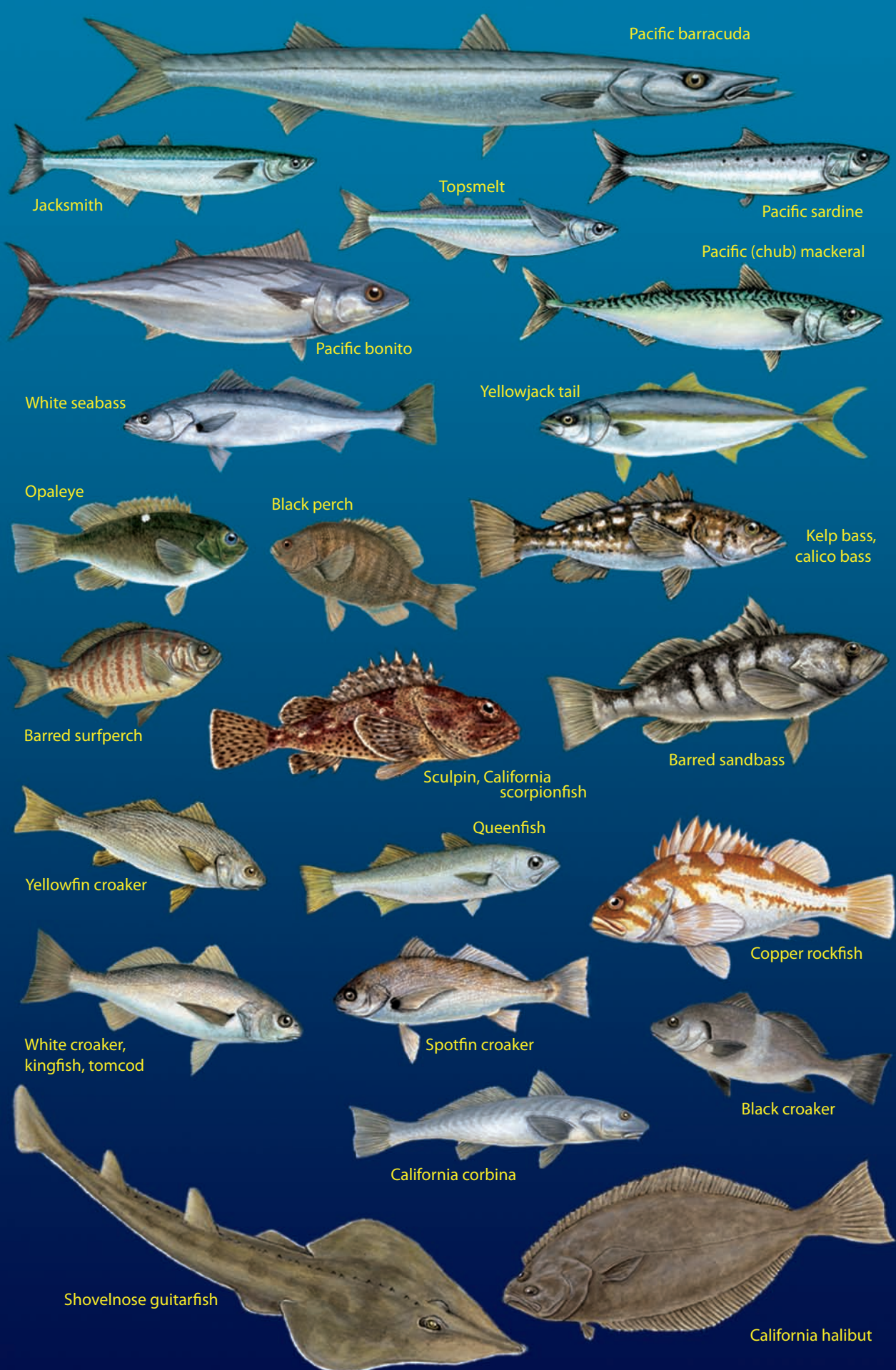
Some of the most common fish along the Los Angeles coast are contaminated with DDT and PCBs. The State of California suggests you limit the amount of some of the fish you eat.



Use the drawings on the next page to know what fish you catch. Compare them to consumption advisories in your area to help you decide what fish you can keep and eat.

You can learn more about fish contamination and consumption advisories by:

- Looking for signs on fishing piers.
- Talking to people handing out information about fish contamination. They can usually be found at your fishing pier, at health clinics, and at local fairs.
- Visiting www.oehha.gov/fish.html, the website of California's Office of Environmental Health Hazard Assessment, a government group that creates the advisories.



Pacific barracuda

Jacksmith

Topsmelt

Pacific sardine

Pacific (chub) mackerel

Pacific bonito

White seabass

Yellowjack tail

Opaleye

Black perch

Kelp bass,
calico bass

Barred surfperch

Sculpin, California
scorpionfish

Barred sandbass

Yellowfin croaker

Queenfish

Copper rockfish

White croaker,
kingfish, tomcod

Spotfin croaker

Black croaker

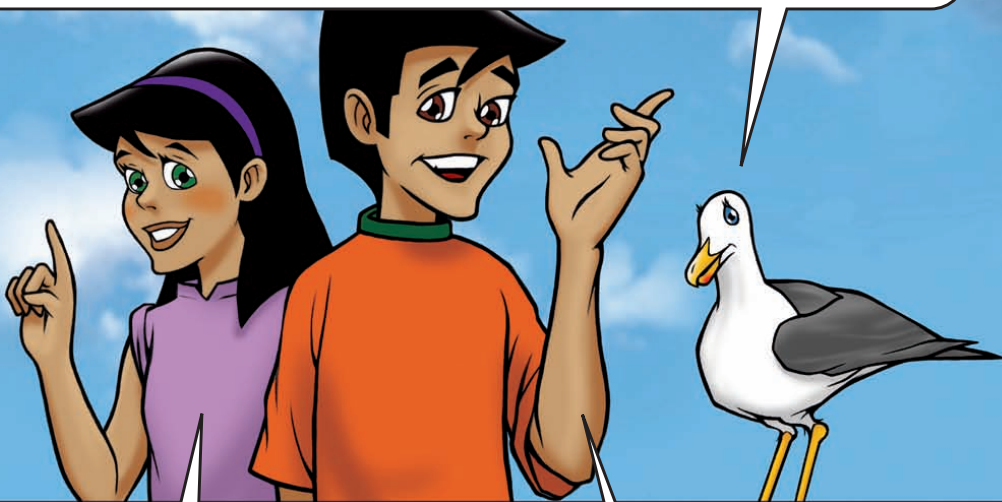
California corbina

Shovelnose guitarfish

California halibut

Remember:

The most contaminated fish are in the ocean near San Pedro and Palos Verdes, and in the harbors for Los Angeles and Long Beach. **DO NOT** eat white croaker from these areas.



Mothers be careful! DDT and PCBs could be especially bad for babies. Mothers who are nursing a baby and women who are pregnant, or may become pregnant, should avoid eating fish from areas contaminated with DDT and PCBs.

Unless you know the fish you catch are not contaminated, eat only the fish fillet - the light-colored meat from the fish.

DDT and PCBs are mostly in the fatty parts of the fish. Throw away the skin, belly fat, dark meat and head of the fish. These parts have the most fat.

And always throw away the oil used to fry fish.

